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WARLORDS ON THE PATH OF DESTRUCTION: UNDERSTANDING POWER  
TRANSITION THEORY IN TWENTIETH CENTURY NORTHERN CHINA

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## **Abstract**

Power Transition Theory has been observed and verified in interstate conflicts; however, little research has been done to test its validity in intrastate conflict. In this thesis, I attempt to see if the hypotheses of Power Transition Theory (that (a) increased parity within a dyad leads to a higher onset of conflict, and (b) increased dissatisfaction with the status quo within a dyad leads to a higher onset of conflict) can be applied to the Warlord Era of China in the early 1900s, a region and time rife with intrastate conflict. To accomplish this, I embark on a quantitative analysis of seven northern Chinese warlords between the years of 1916 and 1930, taking into account not only their parity and status quo dissatisfaction, but also their geographic proximity and alliances. I ultimately find little support for the hypothesis regarding increased parity, but strong support for the status quo dissatisfaction hypothesis. My final section goes into further detail about Feng Yuxiang, one of the previously examined warlords who engaged in conflict with Wu Peifu twice despite having a quarter of his military resources, to try to understand why he would engage in conflict given such a disparity.

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## **Section 1: Introduction - The Future of Conflict**

Recently, there seems to be a shift in the way that conflict is perceived and studied empirically. Conflict (at least to the layman) has historically been seen as between two or more established states; however, intrastate conflict (i.e. conflict between two or more parties within a recognized state) has become more widely acknowledged and studied, especially within the past two decades. This intrastate type of conflict is by no means new, but intrastate conflict is becoming more prevalent, more common, and, therefore, more important, shifting from a niche of international relations research to the forefront.

Theories and paradigms within international relations must recognize this sea change. If theories originally designed to explain interstate conflict are to remain relevant in the 21<sup>st</sup> century, they must be rigorously tested with regards to intrastate conflict. If the claims of these theories cannot apply to intrastate conflict as they do to interstate conflict, then their usefulness in analyzing future conflicts must be called into question.

One theory of particular interest is power transition theory. This theory states that conflict between two states becomes more likely when (a) the less-powerful state becomes more powerful (i.e. a condition of rough power parity is reached between the two states), and (b) the less-powerful state is or becomes dissatisfied with the status quo with regards to the first state. Since its inception, power transition theory has been discussed, researched, and applied to various interstate conflicts, both before and after the theory's invention. There have, however, been only limited analyses provided for intrastate conflicts in the context of power transition theory. Throughout this thesis, I will attempt to close further this research gap.

To accomplish this, I examine the Warlord Era of China with particular insight into the northern region of the country from approximately 1916 to 1930. This time

period and location were both rife with intrastate conflicts. My expectation was that the data would show that instigation of conflict is positively related to both power parity and status quo dissatisfaction. Ultimately, while I found strong and significant support for status quo dissatisfaction leading to conflict, the support for parity leading to conflict onset was insignificant, and I could not meaningfully interpret an interaction combining the two variables.

The next section will outline power transition theory in more detail and why it has been supported in past analyses of conflict. Section three will discuss the existing literature regarding power transition theory, intrastate conflict, and the Warlord Era in China. Through this section, I will identify holes in the literature and how my research intends to fill said holes.

In the fourth section, I will set up the design of my research, including case selection, variable measurement, statistical technique, and justifications of choices made while coding data. The fifth section will present the results found from my statistical research, while section six will provide insight about one puzzling case wherein the warlord Feng Yuxiang decided to engage in conflict with the warlord Wu Peifu, despite having only one fifth of Wu's strength. I will discuss the implications of this research on further studies in the seventh and final section.

## **Section 2: Power Transition Theory**

Interstate conflicts have been observed and debated for decades. Throughout this discourse, several theories emerged to explain why two states might engage each other in conflict. Of these theories, power transition theory is of particular interest to me in my analysis of intrastate conflict.

Power transition theory has developed and changed since its first inception in the late 1950s (Organski), but its core argument has remained consistent. This theory posits that conflict onset will become more likely under two conditions. The first condition states that power parity between two parties will increase the likelihood of an initiation of war. That is, the closer the ratio of two international actors' power (measured by population, military strength, territorial control, economic resources, or some combination of the aforementioned), the greater the chance that they will engage in conflict (Sanjian, 719).

The second condition of power transition theory concerns itself with the status quo. It states that war between two parties becomes more likely as one of the parties becomes more dissatisfied with the status quo. As stated by Bussman and Oneal, "A major war is likely when a rapidly growing, dissatisfied contender challenges the dominant state in hopes of reconfiguring the world order so that its interests will be served." (Bussman and Oneal, 89). Therefore, power transition theory argues that conflict is more likely to occur between two actors who have achieved power parity and wherein one of the actors is dissatisfied with the status quo.

Intuitively, this theory seems to make sense. Weaker states tend not to engage in warfare with significantly stronger states, as they know they will be likely to lose. If the two states are close in power, then they each could believe that they have a reasonable chance of defeating the other in conflict, making initiation of war more likely than if one

party did not believe that it could win. Status quo dissatisfaction would also seem to be an essential factor increasing the risk of conflict onset. If both sides of a conflict are satisfied with the status quo (i.e. there is nothing in the current structure of the world that they want to change), then there would be little (if any) reason for them to engage in conflict. Conversely, war may be the only answer to a state's problems with the status quo if it is dissatisfied, particularly if they are a lesser power in comparison to the other state.

Power transition theory has been empirically tested numerous times, lending credence to the theory beyond simply relying on its intuitive logic. In 1997, Indra de Soysa, John Oneal, and Yong-Hee Park built upon the successes of power transition theory scholars, including Organski and Kugler (1980) and Houweling and Siccama (1988). De Soysa et al consulted and bolstered previous research by Houweling and Siccama (1988) as well as by Singer and Small (1995), to see if their results would be consistent given new ways to measure power. Specifically, they used the Correlates of War composite index and measure of GDP to determine power (de Soysa, 510). At the end of their study, de Soysa et al found strong support for power transition theory given these new measures, in turn validating decades of prior research (de Soysa, 526).

Building off of that research were studies performed by Lemke and Werner in 1996 as part of the Correlates of War project, as documented by William Moul in 2003. Moul's summation of Lemke and Werner's work states that, "If a pair was roughly equal in power capabilities and one of them was committed to change the status quo, the odds of war would be seven times greater than if no power parity and/or no commitment to change the status quo existed." (Moul, 473). Their analyses included dyads from 1854 (the United Kingdom and Russia) and 1941 (the USSR and Germany), adding to the diversity of time periods and regions supported by power transition theory (Moul, 473).



However, power transition theory is not the only theory seeking to explain interstate conflict. A competing theory, the balance of power theory, posits a different explanation for conflict. Contrary to power transition theory, balance of power theory claims that, when parity is high, states will be *less* likely to go to war. One of the most prominent examples of this theory is the case of the United States and the USSR after World War II, wherein neither side engaged in conflict with each other for four decades. Sanjian described this theory further, stating, “According to the balance-of-power theory, movement toward parity should reduce the chances of at least violent conflict; neither party will attack the other because each lacks a clear advantage.” (Sanjian, 719). Thus, to balance of power scholars, conflict is more likely when parties are configured such that one has a preponderance of power, rather than when they are at parity.

Since their inceptions, multiple studies have attempted to test the validity of both power transition theory and balance of power theory. There has been no consensus regarding which theory best explains interstate conflict, and scholars from both schools of thought continue to debate the relative merits of their theories. As neither theory has been universally discredited, it would be unwise to preclude support for power transition theory based on the existence of balance of power theory. Similarly, while both theories have been explored in depth on the interstate level, there have been a lack of studies applying power transition theory or balance of power theory to intrastate conflict, as I will explain in the following section. Only by translating power transition theory to intrastate conflict can we determine if it will remain a viable and robust theory in the twenty first century.

In my application of power transition theory to intrastate conflict—particularly in early twentieth century northern China—I predict two hypotheses. The first hypothesis argues that, as in interstate conflict, the presence of power parity between two actors (in

the case of northern China, these actors are autonomous political entities, i.e. groups or people who are not recognized as the official government but nevertheless control territory, have a population, and collect revenue) will increase the likelihood of conflict onset. My second hypothesis states that the existence of dissatisfaction with the status quo among two autonomous political entities will increase the likelihood of conflict onset. Through the following sections, I will expound on the existing literature regarding power transition theory, intrastate conflict, and northern China in the Warlord Era; I will discuss my research design; and I will analyze the results from the research, determining to what extent power transition theory can explain intrastate conflict in northern China during the Warlord Era of the early twentieth century.

### Section 3: Existing Literature

In reviewing relevant literature, I found a few scholarly works that helped guide my research. The first is a paper written by J.M. DiCicco and J.S. Levy entitled “Power Shifts and Problem Shifts: The Evolution of the Power Transition Research Program”. DiCicco and Levy traced the evolution of Power Transition Theory research from its origins in 1958 to 1999, the year of their article’s publication (DiCicco, 675-676). Their main takeaway was that future Power Transition Theory research must develop concepts and measurements for status quo dissatisfaction and better explain the causal steps leading up to war in order to be successful (DiCicco, 702-703). These lessons were invaluable for my research.

Dr. Lemke is the primary author who has researched Power Transition Theory in the capacity in which I intend to conduct research. His 2002 book, *Regions of War and Peace*, breaks the standard power transition model into a multiple hierarchy model, identifying four key regions and testing the theory within each of them. The multiple hierarchy model replaces power transition theory’s original focus on the major powers with consideration of minor powers competing in regional power hierarchies. The work thus expands power transition theory from the major power to the major and minor power levels. Power was measured through GDP, population, and military strength, and status quo dissatisfaction is measured with an indicator of the buildup of military spending (Lemke 2, 102). Lemke concluded that Power Transition Theory can explain conflicts within the multiple hierarchy model, showing that the theory can be applied to smaller models (Lemke 2, 109).

In 2008, Lemke published an article, entitled “Power Politics and Wars without States”, in which he attempted to apply Power Transition Theory to intrastate conflicts in South America during the 19th century. He took about twenty autonomous political

entities (APEs) from the era and defined their power based on population and their status quo dissatisfaction based upon their attitudes towards Buenos Aires' efforts at unification (Lemke 1, 776). In the end, Lemke found that the Power Transition Theory applies not only among major and minor powers in interstate conflict, but to regional powers in intrastate conflict as well (Lemke 1, 785).

There has also been some research regarding economic impacts in wars in China during the twentieth century. In his 2003 article entitled "Power Shifts and Economic Development: When Will China Overtake the USA?", Emilio Casetti looks at economic activity in China and how that can relate to power shifts and power transitions. Casetti uses economic measures like GDP and GNP, growth rates, and development levels to measure power, comparing China's growth with the relative stagnation of other countries such as France, UK, Germany, Italy, and Japan (Casetti, 661-663). Casetti reports that, through analysis over the past 50 years, China will overtake the United States power-wise within the next 50 years (Casetti, 773). Although this article deals with interstate conflict, it is still valuable by showing the impact of economic development in China starting at the end of the warlord era, and will be useful in my measurements of power.

Another important aspect that has been researched is the variation among regions during the warlord era. This is examined by Elizabeth Remick in her 2002 paper "The Significance of Variation in Local States: The Case of Twentieth Century China". This article examines local state variation, particularly in China during the early and late twentieth century. Remick compares local states in two time periods: 1927-1937 and 1980-1994. Using economic measures like taxation, Remick argues that local state variation occurs during both time periods, a point that Remick believes is often overlooked (Remick, 415). This study shows that the different local states in 20<sup>th</sup> century China acted differently from one another, an invaluable point for my research for

intrastate conflict during that time and in that region.

David Carter provides more support regarding territorial disputes in his 2010 article entitled “The Strategy of Territorial Conflict”. This article attempts to analyze territorial conflict by setting up a territorial dispute game, wherein states challenging a standing territory are given points based on whether they engaged in conflict and, if so, if the target state decided to consolidate their power to improve their standing. Cases such as the Sino-Vietnamese conflict in the late 1970’s and eighteenth-century Prussia were used to illustrate this concept (Carter, 2-5). Carter eventually found that consolidation by the target state was more likely and more effective when the territory in question occupied a strategic location (Carter, 13). Although the examples used were all interstate conflicts, the broader findings may easily be applied to intrastate war, especially if the non-state actors have easily-defined borders.

Power transitions and territorial conflicts are fused together in S. Swaminathan’s 1999 article, “Time, Power, and Democratic Transitions”. Swaminathan examines when democratic transitions are most likely to occur in this article. Using game theory, Swaminathan takes 17 Latin American countries from 1950-1990 and determines that democratic transitions occur when there is relative parity between the two actors; that is, between the government and the opposition. In particular, mass mobilization is examined for the role it plays in determining if an authoritarian government will engage in civil war or negotiate a new status quo (Swaminathan, 178.91). While the study does not deal specifically with China, it does teach valuable lessons about the role of mobilizations in intrastate conflicts regarding power transitions, and it seems to agree with Carter’s conclusions.

James Tong’s 1991 book, *Disorder Under Heaven: Collective Violence in the Ming Dynasty*, is particularly useful for me. In this book, Tong looks at conflicts that

occurred during the Ming Dynasty and attempts to explain when and why conflicts would arise during this time period. Tong measures violence based on frequency, extent, severity, and magnitude. He specifically does not include interstate conflict in the study and instead focuses exclusively on intrastate violence in 11 of the 15 provinces (the other four had insufficient data) and found that the second half of the Ming Dynasty was significantly more violent than the first half (Tong, 25-26). The most relevant information for my research, though, was his aforementioned measures of violence, which will help me further analyze conflicts during the time period that I chose.

I will be primarily basing my research on Lemke's work, particularly his 2008 article, as he is the only author I have found who has studied the general hypothesis in depth. There has not been much research on intrastate conflicts in China during the warlord era, especially with regards to power politics, and I hope to fill this hole with my own studies. Much of the research done in this region has dealt with how to measure power or violence, and those studies can be applied and modified to fit the time frame that I chose.

#### **Section 4: Research Design**

As discussed earlier, I will be attempting to apply power transition theory to northern China during the Warlord Era from the years 1916 to 1930. I chose this location for a few reasons. First, China had an abundance of intrastate conflicts among a reasonably large number of autonomous political entities (henceforth referred to as APEs) during the Warlord Era. Because of time restrictions, I had to narrow my region selection from all of China during the entirety of the Warlord Era to northern China between 1916 and 1930. Much data exist about warlords in northern China and especially during that 15-year period; therefore, given my limitations, it seemed to be the most logical region and time to examine.

More importantly, the Warlord Era serves as an excellent bridge between interstate and intrastate conflict. As is the case with intrastate conflict, they all existed in the same official state, China. However, each APE acted as if it were its own state. Like most recognized states, they had their own armies, populations, territories, and means of revenue. Thus, testing the APEs in the Warlord Era as actors is analogous to testing states as actors with regards to interstate conflict. If power transition theory is to be recognized as a robust theory, then it must apply to wars between official states as well as unofficial states. The Warlord Era, therefore, provides a wealth of cases involving actors that behave like states and should prove to be an acceptable time period with which to analyze power transition theory.

This time and region decision resulted in a total of seven warlord APEs that were active during this timeframe: Feng Yuxiang, Duan Qirui, Wu Peifu, Zhang Zuolin, Feng Guozhang, Xu Shuzheng, and the Kuomintang. These seven APEs were each active over different spans of time between 1916 and 1930 and had varying goals, demands, alliances, enemies, and sizes, providing a large amount of diversity between them, and

thus variation across them. These were also seven of the most influential and active warlords of the timeframe, meaning that data about their activities were readily available. The data for these APEs, including all of the variables mentioned below, were taken from historical accounts of the Warlord Era, including (but not limited to) David Bonavia's *China's Warlords*, Pei-kai Cheng's *The Search for Modern China*, Jonathan Fenby's *Modern China*, Jack Gray's *Rebellions and Revolutions: China from the 1800s to 2000*, Immanuel Hsu's *The Rise of Modern China*, and Wang Ke-wen's *Modern China: An Encyclopedia of History, Culture, and Nationalism*.

To create my data set, I organized each of the APEs into dyadic pairs. I created a row in my data set for each year in which each member of the dyadic pair existed. For instance, Feng Yuxiang was in power between 1918 and 1930, and Duan Qirui's reign as a warlord lasted from 1916 to 1920. Therefore, the dyadic pair of Feng Yuxiang and Duan Qirui would have a total of three rows: 1918, 1919, and 1920. Thus, each dyadic case is observed for each one-year period of joint existence. By organizing the data set in this manner, I ended up with a total of 104 dyadic pairs, or 104 rows.

In order to represent power transition theory, my dependent variable must be the onset of conflict. Conflict is coded in my data set as either a 0 or 1, with 0 indicating no conflict within the dyad during that year and 1 signifying conflict onset.

Since conflict was coded as only a binary value, I wanted to account for conflict intensity. Therefore, I included casualties as a second version of the dependent variable. For this variable, I define a casualty as a death and do not include defectors, prisoners, wounded soldiers/civilians, or any other non-death results of conflict. Casualty numbers were given in all instances of conflict with the exception of the conflict between Zhang Zuolin and the Kuomintang—in that case, I did not code any values, and that case was excluded from the severity analysis (Hsu, 530). I used the same rules in coding casualties



as I did in coding military sizes, with slight advantages in mixed militaries being given to the main commander.

One of two independent variables for my analysis of power transition theory is military parity—that is, the difference in power between the two militaries in the dyad. Most power transition research considers overall measures of power, like GDP. Some, like Lemke’s 2008 article, use gross population. I use the size of warlord APE’s militaries to gauge their power. While there may be some difference between GDP, population and military size, it is reasonable to assume these measures are all highly correlated with each other, and thus can serve as useful substitutes across different contexts. To calculate my measure of parity value, I recorded the military size of one dyad member in one column and the other in another column. I then divided the smaller value by the bigger value, creating a continuous parity value ranging from 0 (total preponderance by one dyad member) to 1 (full parity). In cases where military size data were not available for every year, I extrapolated the military numbers using the two nearest values. For instance, if APE A’s military population was 20,000 in 1920 and 40,000 in 1922, I would code their military population in 1921 as 30,000. If, for instance, those were the only two values that I knew for APE A, but APE A existed from 1919 to 1923, then I would code their military population as 20,000 in 1919 and 40,000 in 1923, as I would be unable to estimate beyond what is given.

In some cases, such as the conflict in 1920 between Duan Qirui and Wu Peifu and Zhang Zuolin, precise military size was unclear. During that conflict, Wu and Zhang’s combined forces numbered approximately 50,000, but no indication was given as to how many troops each APE controlled individually. In these cases, I gave a slight advantage to the commander of the army (in the case of this conflict, the troop advantage was given to Wu) (Wang, 419-420). Also, Wu Peifu inherited Feng Guozhang’s military after

Feng's death in 1918—thus, from 1916 to 1918, Wu and Feng are coded as having the same military sizes, even though these troops are technically the same (Fenby, 140-141). As they were allies who never engaged in conflict with or against each other, I felt justified in making this coding decision.

The other independent variable central to power transition theory is status quo dissatisfaction. In order to code for this, I determined three main issues over which APEs in this time period disagreed: (1) how best to handle warlords in southern China (i.e. whether to go to war against them or coexist with them), (2) how best to handle the Japanese presence in China (i.e. to ally with them or go to war with them), and (3) how best to handle the Kuomintang (KMT)'s presence (i.e. to remain independent or to join with the KMT) (Gray, 179). If the dyad did not disagree about any of these three issues, I coded status quo dissatisfaction as a 0. Otherwise, I coded the value as a 1, 2, or 3, depending on the number of issues about which the dyad disagreed.

There was only one exception to the status quo dissatisfaction coding scheme: in 1923, Feng Yuxiang and Wu Peifu disagreed about Japanese presence (Feng was pro-Japanese, while Wu was vehemently anti-Japanese). In 1924, these positions remained consistent; however, the Japanese began to support Feng more aggressively than previously (Sheridan, 141-145). Therefore, I decided to increase the status quo dissatisfaction from a 1 in 1923 to a 2 in 1924, as the intensity of the dissatisfaction clearly magnified.

In addition to the dependent variable and two independent variables, I also took into account several control variables. The first among them was joint clique membership. During this time period there were three main “cliques”, or loose groups of allies, in northern China: the Anhui Clique, the Zhili Clique, and the Fengtian Clique (Hsu, 484). If both dyad members were in the same clique, I coded this value as 1. If not,

it was coded as 0.

Another control variable was neighbor status. If the borders of the two APEs touched, I coded this as a 1. If not, it was coded as 0. It should be noted that border definitions during the early Warlord Era in northern China were, at times, somewhat ambiguous—I therefore only coded the dyad as being neighbors if I had evidence (that is, in the absence of evidence, I erred on the side of coding a 0).

In a few of the observed cases, an APE would defect from its clique in that year. If this happened, the “defection” control variable was coded as a 1. Otherwise, I coded it as 0.

My final control variables take into account international support for each dyad member from three countries: Japan, Russia, and the United States/Britain. If a dyad member received tangible support (i.e. technology, troops, or money) from Japan, then I coded the value as a 1. Otherwise, it was coded as a 0. These same rules apply for support from Russia and support from the United States/Britain as well. I include these control variables to examine whether foreign interference makes war onset more or less likely among north-China warlords in the 1920s.

After compiling the data, I ran several logistic regressions and linear regressions with the statistical software program Stata, to determine the relationship between conflict, parity, and status quo dissatisfaction, both as stand alone relationships and in the presence of various control variables. The results of these analyses are presented in the next section.

## **Section 5: Research Analysis**

This section presents my quantitative analyses of the data described in the previous section. In each of the following cases, a P score is considered significant if it is less than 0.1, and the P score's significance increases as it gets closer to 0.0. Each table was based on analyses of 104 observations, with the exception of Table 2, which featured only 103 observations. Table 1 shows a logistic regression of parity and status quo dissatisfaction's effect on the onset of conflict.

**Table 1: Logistic Regression of War Onset**

Variable	Coefficient	Standard Error	Z	P >  Z
Parity	-2.944895	1.975312	-1.49	0.136
Status Quo Dissatisfaction	2.636616	0.7425592	3.55	0.000

In Table 1, parity's relationship with conflict onset is negative but insignificant, as its P value of 0.136 is above the significance threshold of 0.1. Status quo dissatisfaction, on the other hand, displays a positive coefficient and is quite significant, with a P value of 0.000. From Table 1, a meaningful relationship between conflict onset and status quo dissatisfaction can be inferred, but conflict onset's relationship with parity is at best unclear because the relationship is insignificant.

Table 2, shown below, reports a linear regression of parity and status quo dissatisfaction's effect on the severity of conflict. In this model the dependent variable measures the number of casualties in the observed conflict (with instances of No War scored as zero dead). As mentioned earlier, this model features 103 observations instead of the 104 analyzed in Table 1. This difference is due to the fact that there were no available data for casualties for one of the observed conflicts, leading that case to be

deleted in the analysis.

**Table 2: Linear Regression of War Severity**

Variable	Coefficient	Standard Error	T	P >  T
Parity	-308.0267	2059.927	-0.15	0.881
Status Quo Dissatisfaction	4080.187	878.4071	4.64	0.000

In Figure 2, parity's relationship with conflict severity still produces a negative coefficient and a P value of 0.881, well above the significance threshold of 0.1. Status quo dissatisfaction, on the other hand, results in a coefficient of 4080.187. That signifies that an increase in the status quo dissatisfaction variable from 0 to 1 or from 1 to 2 results in an average increase in the number of casualties in a conflict by about 4080. Moreover, the P value remained very low at 0.000, adding more support to the significance of status quo dissatisfaction's positive relationship with conflict severity.

Table 3, shown below, reports another logistic regression of parity and status quo dissatisfaction's relationship with conflict onset. However, this model also takes into account several control variables, including neighboring status, each member of the dyad's support from Japan, and each member of the dyad's support from Britain and the United States (coded as "West"). Russian support was not included in this analysis, because all instances of Russian support had the same value on the dependent variable. There is thus perfect identification between Russian support and war onset, resulting in the Russian support variable's exclusion from the model.

**Table 3: Logistic Regression of War Onset, Controls included**

Variable	Coefficient	Standard Error	Z	P >  Z
Parity	-5.175692	2.901217	-1.78	0.074
Status Quo Dissatisfaction	2.466729	0.958039	2.57	0.010
Neighboring	1.578486	1.414487	1.12	0.264
Jap. Support A	1.456147	2.079933	0.70	0.484
Jap. Support B	2.378651	1.553029	1.53	0.126
West Support A	2.670711	2.415198	1.11	0.269
West Support B	1.855264	2.257435	0.82	0.411

As shown in Table 3, parity's coefficient remains negative. However, its P value decreased to 0.074, indicating that this negative result is now significant. Status quo dissatisfaction, as in the previous two models, maintains a positive coefficient and a P value of 0.010, adding further credence to its positive relationship and significance. Neighbor status, Japanese support, and Western support each resulted in positive coefficients, yet none of those control variables provided significant P values. Through this analysis, it can be determined that, in the presence of control variables, status quo dissatisfaction's relationship with conflict onset remained positive and significant, while parity's relationship with conflict onset became significant and negative.

Table 4, the final table in my analysis, is a logistic regression replicating Table 1, but this time reporting odds ratio for parity and status quo dissatisfaction's influence on conflict onset instead of regression coefficients. That is, this model shows the odds of the presence of parity resulting in conflict, as well as the odds of the presence of status quo dissatisfaction resulting in conflict. The control variables from the previous model are not

taken into account.

**Table 4: Logistic Regression of Conflict Onset, Odds Ratios rather than coefficients**

Variable	Odds Ratio	Standard Error	Z	P >  Z
Parity	0.0526076	0.1039164	-1.49	0.136
Status Quo Dissatisfaction	13.96586	10.37048	3.55	0.000

In Table 4, parity's odds ratio is 0.0526076 with a P value of 0.136, making the parity results insignificant. Status quo dissatisfaction is shown as having a P value of 0.000, making its odds ratio result of 13.96586 a significant value. That means that, when a status quo dissatisfaction value of at least 1 is present, conflict onset is expected about 14% of the time. Similarly, if the value of Status Quo Dissatisfaction is 2, conflict is expected about 28% of the time. Given how infrequent conflicts are, these increases are reasonably large, and I conclude that status quo dissatisfaction does have a meaningful in addition to statistically significant, effect on the probability of conflict.

The results from all four models shown in this section reveal important information regarding the effectiveness of power transition theory to explain conflict in northern China from 1916 to 1930. In each model, status quo dissatisfaction proved to be a strong and significant positive indicator of conflict, with P values ranging from as high as only 0.010 to as low as 0.000. On the contrary, parity's effect on conflict onset proved to be both insignificant and, contrary to expectations, negative. Unfortunately, while power transition theory motivates an interactive hypothesis where dissatisfaction's and parity's effects on conflict are contingent on the presence of the other, I was unable to estimate an interaction term combining these effects because in my small data set, they are so highly correlated with each other. The correlation between SQ Dissatisfaction and

the interaction term was 0.93, producing such massive multicollinearity that a model with an interaction term is not interpretable. In terms of my hypotheses, I find only partial support for power transition expectations. Status quo dissatisfaction performed in my Chinese sample as expected, but parity did not.

In the next section I discuss an anomalous case in which a dyadic pair engaged in conflict despite a parity value of only 0.25. Power transition theory anticipates a very low probability of conflict among such unequal actors. Since this case thus presents such an extreme outlier from theoretical expectations, it is intrinsically interesting to try to determine what the weaker actor thought they could gain in such an asymmetric struggle.



## **Section 6: The Curious Case of Feng Yuxiang**

Throughout the research, one case in particular stood out as an anomaly. In 1924, the warlord Feng Yuxiang decided to engage in conflict with another warlord, Wu Peifu, with whom he had been previously allied. This in itself was not strange—after all, the Warlord Era received that name for a reason, and betrayals and defections were not uncommon. What is puzzling, however, is that the value of military parity between Feng and Wu was 0.25 in 1924. That means that, despite having one fourth of the military resources of Wu, Feng still decided to engage in conflict.

To understand why this may have happened, it is helpful to know a bit about Feng Yuxiang. Feng was a warlord who was primarily based in the Zhili province of northern China. He gained his official start as a warlord in 1918 when he was named Defense Commissioner of Changde. In Changde, in addition to training his army, Feng first engaged in civil administration, which effectively made him a warlord. Feng would continue training his army, which now was comprised of over 10,000 troops, at Changde for two years (Sheridan, 73-74).

In 1920, Feng and his troops decided to leave Changde and stay in Xinyang. At this point, he began to adopt more illicit characteristics (Sheridan, 99). As James Sheridan explains, “Early in 1921, Feng turned to banditry. The victim he chose was the Peking government itself. Learning that a train was to pass through Xinyang carrying several hundred thousand dollars in government revenue, Feng simply had his troops stop the train and seize the money. Then he notified Peking of his actions” (Sheridan, 100). The following year, Feng was named warlord of Henan for his role in a war between Zhili and Fengtian cliques, with Feng fighting on behalf of the former. This conflict saw Feng’s forces allied with those of the significantly more powerful Wu Peifu against the Fengtian warlord Zhang Zuolin. (Sheridan, 97, 112, 118).

At this point, the alliance between Feng and Wu was unsurprising. Wu had a deep hatred for the presence of the Japanese in China dating back to his start as a warlord in 1916. Feng also had issues with Japan starting in 1918. While training his troops and controlling Changde, Feng encountered several stores in town that flew Japanese flags. He ordered these shop owners to take down their flags. Although the issue was relatively minor, it invoked the ire of the Japanese government (Sheridan, 95).

These tensions became more heightened in 1919 when minor skirmishes evolved into major problems as anti-Japanese sentiments spread around China. Japanese naval leaders ordered Feng to protect the Japanese shops in Changde from unnecessary violence under threat of military action. Feng complied reluctantly, putting guards in front of Japanese shops. This drove business away, and “the Japanese then requested that the special guards be removed, and absolved Feng from responsibility for their further safety” (Sheridan, 95).

Soon after, though, Feng’s position regarding the Japanese presence in China would radically shift. In 1924, Wu Peifu fought against Zhang Zuolin again in what was known as the Second Fengtian-Zhili War. Although Feng initially supported Wu as he did in the 1922 conflict, he suddenly changed his allegiances to Zhang’s forces. This was accomplished due in no small part to the support of 1,500,000 yen promised by the Japanese government, a promise on which they delivered (Sheridan, 141-145).

It is clear, then, that two primary factors persuaded Feng Yuxiang to engage in conflict against a substantially more powerful Wu Peifu. First, as discussed in the previous paragraph, Feng had significant financial support from the Japanese government. Second, and more importantly, Feng fought alongside Zhang Zuolin, who was more evenly matched against Wu Peifu. The parity value between Wu and Zhang in 1924 was 0.68—more interestingly (and more importantly), the parity value between Wu

and the combined forces of Zhang and Feng in 1924 was 0.92. It would make intuitive sense, then, from a purely power-based standpoint, that Zhang and Feng's allied troops would engage in conflict against Wu.

## **Section 7: Conclusion – The Future of the Future of Conflict**

In the previous sections I argued and tested my prediction that the presence of parity and status quo dissatisfaction would coincide with an increase in the likelihood of conflict onset. While I found much support in favor of status quo dissatisfaction correlating with conflict, my findings regarding parity were insignificant.

There are several possible reasons why the parity findings provided no significant results. First, my measures of power took only military size and strength into account. A more comprehensive study that measured region areas, total population, and/or revenue may produce more accurate results. Also, due to time and data constraints, I was limited to observing only 104 dyadic pairs. In future studies, being able to examine more dyadic pairs involving more APEs may provide more significant results. Finally, a wider case selection would allow for more diversity with regards to cases of conflict onset as they relate to status quo dissatisfaction. In my research, each recorded conflict had an associated status quo dissatisfaction of at least 1. A more diverse pool of cases may uncover a conflict between two actors in which there was no status quo dissatisfaction, which would certainly affect the power transition theory model.

Despite the only partial success of my research, the future for power transition theory research looks promising. There exist a myriad of locations, time periods, and possibilities from which to choose with regards to case selection. Future researchers must have an intimate understanding of the studied time period and region in order to determine proper variables, measures, and units—especially with regards to status quo dissatisfaction, a variable that has often been difficult to properly measure. While power transition theory's robustness in explaining conflict during the early years of the Warlord Era in northern China may not be fully supported through my research, it remains a viable theory which will certainly be examined in more detail in years to come.

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